

Chemical Engineering

Semester	Southeastern Illinois College				University of Missouri-Rolla			
	SIC #	Title	Hours	Grade	UMR #	Title	Hours	
First	MATH 161*	Pre-Calculus	4		MATH 004*	College Algebra	3	
	CHEM 121	General Chemistry I	5		CHEM 001, 002	General Chemistry and Lab	5	
	ENG 121	Rhetoric and Composition I	3		ENG 020	Exposition and Argumentation	3	
		Humanities/Social Science Elective	3			Humanities/Social Science Elective	3	
	Total Semester Hours			15	Total Semester Hours			14
Second	MATH 162	Calculus & Analytic Geometry I	5		MATH 014	Calculus with Analytic Geometry I	5	
	CHEM 122	General Chemistry & Qualitative Analysis II	5		CHEM 003, 008	General Chemistry and Quantitative Analysis	5	
	HIST 122 or HIST 241or	History of Western Civilization or American History I or	3		HIST 112 or HIST 175 or	Modern Western Civilization or American History to 1877 or	3	
	GOV 121	American Government			PS 090	American Government		
	ENG 122 or SPCH 121	Rhetoric and Composition II or Principles of Speaking	3		ENG 060 or SPMS 085	Writing and Research or Principles of Speech	3	
	Total Semester Hours			16	Total Semester Hours			16
Third	MATH 221	Calculus and Analytic Geometry II	5		MATH 015	Calculus with Analytic Geometry II	5	
	CIS 254	C++ Object Oriented Programming	3		CS 74, 78	Intro to Programming Methodology and Lab	3	
	PHYS 221	General Physics I	5		PHYS 023	Engineering Physics I	4	
		Humanities/Social Science Elective	3			Humanities/Social Science Elective	3	
	Total Semester Hours			16	Total Semester Hours			15
Fourth	MATH 222	Calculus and Analytic Geometry III	5		MATH 022	Calculus with Analytic Geometry III	4	
	PHYS 222	General Physics II	5		PHYS 024	Engineering Physics II	4	
	ECON 121 or ECON 122	Principles of Macroeconomics or Principles of Microeconomics	3		ECON 122 or ECON 121	Principles of Macroeconomics or Principles of Microeconomics	3	
	Total Semester Hours			13	Total Semester Hours			11

This is a guide; with the consent of your advisor you may choose to vary the sequence or combination of some courses in a manner appropriate to individual course requirements and prerequisites.

A grade of "C" or better is required in calculus and physics.

*MATH 161 will not count toward an engineering degree at UMR; the credit and grade will transfer.